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DATE: September 27, 1997

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September 27, 1997

Reference No. 4770

Ms. Denise Gawlinski
Community Involvement Coordinator
Office of Public Affairs (P-19J)
United States Environmental Protection Agency
Region V
77 West Jackson Boulevard
Chicago, Illinois 60604

Dear Ms. Gawlinski:

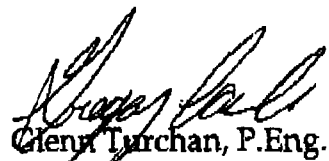
Re: Comments on U.S. EPA Proposed Plan
Textile Road Site
Washtenaw County, Michigan

On behalf of the Textile Road Site (Site) Cooperating Parties Group (Group), please find enclosed comments, prepared by Conestoga-Rovers & Associates (CRA), on the United States Environmental Protection Agency (U.S. EPA) proposed plan for the removal of PCB contaminated material at the Site. Additional comments by individual Group members may be forwarded on September 29, 1997.

Should you have any questions, please do not hesitate to contact our office.

Yours truly,

CONESTOGA-ROVERS & ASSOCIATES


Glenn Turchan, P.Eng.

GC/ml/1
Encl.

c.c.: P. C. Lall (U.S. EPA)
Mony Chabria (U.S. EPA)
Cooperating Parties Group
Greg Carli (CRA)

**COMMENTS ON THE U.S. EPA PROPOSED PLAN
TEXTILE ROAD SITE
YPSILANTI TOWNSHIP, WASHTENAW COUNTY, MICHIGAN
SEPTEMBER 27, 1997**

Comment No. 1

Page 1, Paragraph 1, Sentence 2 and 3: This section of the Proposed Plan refers to the Engineering Evaluation/Cost Analysis as the source for the information contained in the information sheet. No reference is made to other significant documents which provide relevant information on the Textile Road Site (Site) and the proposed removal action alternatives. Specifically, the "Re-evaluation of Select Removal Action Alternatives: Addendum to EE/CA" (Addendum to EE/CA), report prepared by CRA (February, 1996) provides significant additional information on the on-Site and off-Site disposal alternatives which was utilized in the final selection of a removal action.

Comment No. 2

Page 1, Paragraph 2, Sentence 4: *"Soils with polychlorinated biphenyl (PCB) contamination greater than 50 mg/kg would be removed from the site for disposal at a TSCA-permitted landfill: soils with PCB contamination greater the 500 mg/kg would be incinerated in a TSCA-permitted incinerator."*

The referenced sentence does not accurately reflect the disposal options provided by TSCA or the removal action proposed by the Cooperating Parties Group (Group) for the Textile Road Site. Disposal options for the excavated soil depend upon the concentrations of PCBs contained within the soil. Soils containing PCBs in the range of 21 to 50 mg/kg will be disposed of at a Michigan Act 451, Part 115 Type II sanitary landfill (i.e. RCRA Subtitle D sanitary landfill). Soils containing PCBs above 50 mg/kg will be disposed of in the Environmental Quality Company's (EQ) TSCA permitted landfill located in Belleville, Michigan.

In the EE/CA, incineration of soils with PCB concentrations greater than 500 mg/kg was listed as an alternative to landfilling in a TSCA permitted landfill. However, under TSCA, any non-liquid PCBs at concentrations of 50 ppm (50 mg/kg) or greater in the form of contaminated soil, rags, or other debris can be disposed of in a TSCA chemical waste landfill (40 CFR § 761.60 (a) (4) (ii)). EQ's TSCA Permit is consistent with the TSCA requirements and therefore does not include any additional restrictions. Material containing PCBs at concentrations greater than 500 mg/kg do not require incineration. Therefore, all soils over 500 mg/kg will be disposed to the TSCA landfill.

Comment No. 3

Page 2, Paragraph 2: Although the area of contamination is limited to the northern 10 to 20 acres of the property, the discussion of the Site background contained in the information sheet refers to the property as a "62-acre industrial property." The reference to the property as industrial is based on the historic land use (gravel extraction operations) and the current proposed future land use for the property. The future land use plan for the Site currently contemplates a "light industrial" land use. This use is consistent with land use planning principles which would contemplate a transition from the general industrial land use to the east to residential/agricultural use to the south and west. The current zoning for the Site is a mix of local business (B-1) and one family residential (R-4). The legal description of the zoning indicates that a portion of the Site 430 feet along Bunton Road, and 1,019 feet along Textile Road (approximately 10 acres), is "B-1 Local Business." The remaining 52 acres of the Site is zoned R-4 - One Family Residential (6,000 sq. ft.).

In developing the Extent of Contamination (EOC) Report and the Engineering Evaluation/Cost Analysis (EE/CA), CRA, in consultation with the U.S. EPA, determined that the most reasonably foreseeable land use for the Site is light industrial. As a result, a removal action of contaminated materials at the Site to Michigan Act 451, Part 201 industrial criteria will provide a flexible standard for future development while maintaining protectiveness of human health and the environment. A generic industrial cleanup would allow unrestricted industrial or commercial use of the Site in addition to a restricted residential use of the Site. As noted above, the southern 40 to 50 acres of the Site is uncontaminated and therefore could be used for any unrestricted land use.

The decision to employ industrial cleanup criteria was based on the following factors:

- historically (since the early 1940s) the Site has been used for industrial purposes (as identified in the U.S. EPA information sheet, and the U.S. EPA review of historical aerial photographs);
- the current Master Plan for Future Land Use of Ypsilanti Township indicates that the intended development of the Site is "light industrial";
- the adjacent property to the east of the Site (Ford Automotive Plant), which runs the entire length of the Site, is currently zoned "General Industrial". The Automotive Plant has been in operation since the late 1950s. After consultation with Ford, Ford has indicated that this plant will remain operational for the foreseeable future. Therefore, a "light industrial" or "commercial" use of the Site provides a buffer zone between the general industrial property to the east, and the residential property to the west (across Bunton Road). The buffer zone concept is consistent with accepted land use planning principles;

- the Master Plan for Future Land Use indicates that the currently proposed land use of the property to the south of the Site is light industrial; and
- the current zoning of B-1 in the primary areas of contamination would dictated a cleanup to the Generic Commercial, Subcategory IV Direct Contact Value of 58.0 mg/kg, therefore, a removal action to industrial cleanup standards provides flexibility for future land uses which are consistent with both the current zoning and the reasonably foreseeable future land use.

Generic Soil Direct Contact Criteria, which form the basis for the proposed removal action at the Site, are intended to protect individuals from the systemic health effects from ingestion and dermal absorption of hazardous substances in soil. For residential purposes, compliance with direct contact criteria (2.3 mg/kg for PCBs) are required throughout the affected media in the unlimited (emphasis noted) residential land use category. Moreover, Part 201 of Michigan Act 451 also provides for "limited" use cleanups. For limited use cleanups, site specific exposure assessment, exposure controls and land use restrictions may be employed to prevent exposures to more highly contaminated soils. In addition, average on-site soil concentrations may be used to determine compliance with the soil direct contact value.

Under the proposed removal action, all soil contaminated above 21 mg/kg would be removed from the Site (approximately 50,000 square feet of surface area). The remaining soils would represent approximately 50,000 square feet of area with material contaminated between 2.3 mg/kg and 21 mg/kg, and 59.5 acres of material contaminated at levels below 2.3 mg/kg, if at all (the majority of which would not contain PCBs). Based on this information, and the use of conservative assumptions, the following calculation can be used to illustrate the estimated average PCB concentration in soil at the Site remaining after the proposed removal action has been implemented:

$$\begin{aligned}
 \text{Average PCB Concentration} &= 50,000 \text{ ft}^2 \times 11.63 \text{ mg/kg (average of 2.3-21 mg/kg portion)} \\
 &\quad + 50,000 \text{ ft}^2 \times 0 \text{ mg/kg (removed portion)} \\
 &\quad + 2,593,000 \text{ ft}^2 \times 0.5 \text{ mg/kg (remainder of Site)} \\
 &\quad / 2,690,000 \text{ ft}^2 \text{ (total site area)} \\
 &= 0.70 \text{ mg/kg}
 \end{aligned}$$

Therefore, on a property wide basis, the average PCB concentration in the soil material would be approximately 0.70 mg/kg (based on conservative assumptions) and significantly less than the 2.3 mg/kg Generic Residential Soil Direct Contact Criteria (after the cleanup to industrial standards). Therefore, the residual risk for the property, associated with cleanup of the contaminated areas of the property to industrial standards, will be below residential standards.

Furthermore, if a specific land use (e.g. recreational or limited residential) was proposed for the Site, Michigan Act 451, Part 201 provides algorithms which can be used to

calculate site-specific risk-based cleanup criteria. The algorithms account for site-specific exposure assumptions and pathways to provide cleanup criteria that are less stringent but equally protective to human health and the environment for the intended land use. The site-specific risk-based cleanup approach, in conjunction with appropriate land use restrictions, could produce a cleanup standard consistent with that proposed by the Cooperating Parties Group and the U.S. EPA.

Comment No. 4

Site Investigations Section:

The information sheet provides a discussion of the Site investigations that were performed by the MDNR and the U.S. EPA during the period of 1983 through 1991. Although the information presented is correct, the information sheet does not include any of the Site characterization information that has been collected at the Site by the Group.

Significant relevant information with respect to contaminant characterization at the Site was provided in the Extent of Contamination (EOC) Study conducted for the U.S. EPA by the Group. The information provided in the EOC forms the primary basis for the development of alternatives presented and evaluated in the EE/CA. In general, the EOC investigation identified exceedances of cleanup levels in the upper sand/fill materials located to the north and west of Pond 1. No exceedances of cleanup levels were observed in pond sediments during the EOC investigation. PCBs were observed above cleanup levels in one groundwater monitoring well (but are not expected to be mobile).

The Site characterization data collected by the Group and presented in the EOC Report, forms the basis for the EE/CA and the evaluation of alternatives. A discussion of this data (or a reference to the data) is essential in order to objectively evaluate the proposed alternatives.

Comment No. 5

Page 2, Paragraph 4, Last Sentence: This sentence refers to the risks associated with the contaminants present at the Site. The reference to risk should be qualified to reflect the "potential" risks associated with Site contaminants.

Comment No. 6

Page 2, Paragraph 6: Risks associated with exposure to Site related contamination should be discussed in terms of potential risks to human health and the environment.

Comment No. 7

Page 2, Paragraph 7: Paragraph 7 misrepresents the potential risks at the Site. The contaminants present at the Site could lead to potential risks over long periods of time (i.e. chronic exposures). The concentrations of PCBs are not present at levels which could lead to the imminent and substantial endangerment of the public health.

During the drilling of the boreholes to characterize the Site, a clay stratum was encountered at a depth of 15 to 22 feet below ground surface (BGS) with a thickness of 14 to 18 feet. This clay stratum, lacustrine clay, exists across the entire Site and has been identified throughout Wayne and Washtenaw Counties. Lacustrine clay typically exhibits a hydraulic conductivity of 10^{-7} - 10^{-10} cm/sec. (Groundwater, Freeze/Cherry, 1979). A U.S. EPA Field Investigation Team (FIT) identified an unconsolidated lacustrine clay deposit approximately two miles north of the Site. The FIT, in a report titled, "Extent of Contamination Study, Willow Run Site, Washtenaw and Wayne Counties, Michigan", and dated February 1984, determined the hydraulic conductivity to be on the order of 10^{-8} cm/sec. The hydraulic conductivity of samples collected from the clay stratum on Site were also determined to be on the order of 10^{-8} cm/sec. The thickness and low hydraulic conductivity of this clay stratum effectively serves as a natural barrier to limit the downward migration of groundwater from the upper water table zone to the lower sands aquifer.

Comment No. 8

Page 2, Last Paragraph: The last paragraph of Page 2 discusses the potential risks associated with recreational usage of the Site such as fishing. Fish tissue samples were collected by the MDNR in June, 1983. The samples were analyzed for PCBs and pesticides. The results of the five tissue samples indicated no detections of PCBs or pesticides. In addition, PCBs have not been detected in surface water samples collected from the Site and sediment samples collected during the EOC investigation. Finally, it is not reasonable to assume a potential risk to on-Site trespassers for exposure to groundwater. This exposure scenario will not exist during a trespass event.

Comment No. 9

Page 3, Alternative 1A - Off-Site Disposal: The description of the U.S. EPA's recommended alternative includes soils with a PCB concentration greater than 500 mg/kg being incinerated at a TSCA permitted incinerator. Furthermore, the description does not reference the disposal of material containing PCB concentrations in the range of 21 to 50 mg/kg at a Michigan Act 451, Part 115 Type II sanitary landfill. Please refer to Comment No. 2 for a discussion on the proposed disposal alternatives.

Comment No. 10

Page 3, Alternative 2 - No Action: The discussion of the no action alternative should include mention of the monitoring program that would be implemented at the Site to track groundwater quality and provide warnings if contaminants are detected above regulatory levels.

Comment No. 11

Page 3, Alternative 3 - Limited Action: The limited action alternative description should note that all of the elements of Alternative 2 would be included in Alternative 3.

Comment No. 12

Page 3, Alternatives 4A and 4B: It should be noted in the discussion of the physical containment alternatives that all elements of Alternative 3 would be included in Alternatives 4A and 4B.

Comment No. 13

Page 3, Alternative 5A - Solidification/Stabilization and Capping: The discussion of Alternative 5A includes a description of the solidification/stabilization process indicating that all excavated waste materials would be treated by solidification/fixation. The wording of this alternative is unclear and as a result misleading. The description should be clarified to indicate that under this alternative, all contaminated material would be excavated and treated, in batches, using solidification/stabilization, and replaced in the excavated area. A cap system, as outlined in Alternative 4A, would then be constructed over the treated material. It should also be noted that the solidification/stabilization treatment procedure immobilizes the PCBs in the soil in a hard, high-strength matrix, resistant to water infiltration and leaching action.

Comment No. 14

Page 3, Alternative 5B - Solidification/Stabilization and Capping, and Groundwater Cutoff Wall: Please refer to Comment No. 13 for a discussion on the solidification/stabilization process.

Comment No. 15

Page 3, Alternative 5D - Gas-Phase Chemical Reduction, Solidification /Stabilization and Capping: It should be noted that at the time of the EE/CA this process was an emerging technology that had not been proven or utilized in a large scale application. This technology has still not been routinely applied to remediate sites.

Comment No. 16

Page 3, Alternative 5E - Low Temperature Thermal Desorption (LTTD), Solidification/Stabilization and Capping: The description under Alternative 5E of the LTTD technology suggests that this process is only applicable to treating VOC compounds. LTTD is an effective technology for removing organic compounds (specifically the more volatile compounds) from soils. LTTD has been shown to be effective at treating materials contaminated with coal tars, petroleum hydrocarbons, semi-volatile and volatile organic compounds (SVOCs, VOCs), and higher boiling compounds such as PCBs. The discussion on LTTD should be revised to refer to the treatment of organic compounds which have a greater tendency to volatilize, rather than specifically referencing VOC compounds.

Comment No. 17

Page 4, Last Paragraph: It should be noted that the Cooperating Parties Group have played an active role in developing the removal action at the Textile Road Site. It is the full intention of the Cooperating Parties Group to participate in the proposed removal action and negotiate an agreement with the U.S. EPA for the Cooperating Parties Group to implement the Proposed Plan.

Comment No. 18

Page 7, Cleanup Alternatives Summary Table:

The estimated present worth cost for the off-Site disposal option (Alternative 1A) is based on the Proposed Removal Action Engineer's Project Cost Estimate, prepared by

CRA and forwarded to the U.S. EPA in a letter to Mr. Mony Chabria and Mr. P.C. Lall dated July 18, 1997. This estimate was prepared to provide an update to the Addendum to EE/CA which was submitted to the U.S. EPA on February 28, 1996. In order to prevent confusion, the off-Site disposal present worth cost presented in the summary table should reference that the information was not taken from the Addendum to EE/CA.

The on-Site disposal option (Alternative 1B) was also re-evaluated in the Addendum to the EE/CA. This document provided a revised cost estimate for Alternative 1B based on additional sampling and a re-evaluation of contaminant delineation. The revised present worth cost of \$1.7 million should be presented in the summary table and reference noted, rather than the original cost estimate provided in the EE/CA.

The present worth cost for the on-Site incineration, solidification/stabilization, and capping presented in the EE/CA was \$31.74 million. The summary table presents a present worth cost of \$32.74 million.